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Classification

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OFFICE OF SCIENTIFIC INTELLIGENCE, CIA: Request for Clearance and Permission to Publi

FROM : Chief, Intelligence Production Staff/OSI, [redacted]

TO : Mr. Robert E. Olson 2064 L Bldg

TITLE OF PUB: THE SOVIET SPACE RESEARCH PROGRAM - SPACE VEHICLES

Project No. (or Pub. No. if completed) [redacted]

COMMENTS

[redacted] CLEARANCE OFFICER'S INI

Approved as presented below.

15 January 1960
DATE

Class. of Fin. intell. pub. [redacted]

[redacted]

Extracts from source documents to be used

[redacted]

Internal structural members and fittings within a space vehicle, while not subject to direct heating, will be subjected to relatively high temperatures and to rapid temperature changes. With suitable design, however, and possible cooling, the anticipated service temperatures of internal components may be sufficiently below the skin temperature to permit the use of more conventional alloys of construction such as stainless steel or titanium alloys and even certain of the aluminum and magnesium alloys. The USSR produces a variety of stanless steels similar in composition to those produced in the West. Soviet titanium technology is also similar to that of the West and a number of alloys are being produced on a limited scale. Aluminum and magnesium are also produced in the USSR in a variety of compositions. Observations of models of Soviet satellites and the Machta space probe and its carrier rocket indicates that aluminum is the preferred material of construction. Reports on a Soviet missile production facility, Plant 82, Tushino, claim that duraluminum and stainless steel sheets were used for missile skins and stainless steel for the nose cones.

(IPS) Editor - OSI - Analyst (Div) [redacted]

For Release to: Foreign Government(s) [redacted]
Non-USIB Agency(ies)

[redacted] 76082

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